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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,420

05/11/2006

Uwe Neumann

VOGEL.AIRB.PT1

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INTELLECTUAL PROPERTY LAW GROUP LLP
12 SOUTH FIRST STREET
SUITE 1205
SAN JOSE, CA 95113

EXAMINER

O'HARA, BRIAN M

ART UNIT

PAPER NUMBER

3644

NOTIFICATION DATE

DELIVERY MODE

08/17/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pt_docket@iplg.com

Office Action Summary	Application No. 10/579,420	Applicant(s) NEUMANN ET AL.	
	Examiner Brian M. O'Hara	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-52 and 54-64 is/are pending in the application.
- 4a) Of the above claim(s) 38-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52 and 54-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/23/2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 52, 55, 57, 59, 61, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedell et al (US 5686907 A) in view of Baston et al. (US Patent 4,260,121).**

4. Regarding **Claims 52 and 55**, Bedell et al. discloses an apparatus for load limiting in an aircraft high-lift system comprising: a branching drive system (See Fig. 11) for mechanical power transmission to drive stations (stations indicated by gearing 43) for individual segments of landing-flap/slat systems (20 and 22) via respective drive trains (36) position sensors (44 and 34), and a drive unit (35), wherein the position sensors have angle position transmitters (34), which operate as asymmetry

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transmitters, at the ends of the drive trains (See Fig. 4), wherein the apparatus has a monitoring unit (50) for load limiting which is connected to the position sensors (See wires in Fig. 4) and is designed to process signals from the position sensors (34) by measuring signals from at least two position sensors (34 and 44) and calculating at least one reference variable ("expected slat states"; See Column 7 Lines 47-48) from the measured signals and, by comparison of the at least one reference variable which represents a load in the drive trains with a corresponding threshold value ("actual slat sensor states" See Column 7 Lines 49-51), which is predetermined from a maximum permissible load, produces a control signal (shut down) for monitored limiting (35) of the power supply (52) to the drive unit in the sense of limiting a drive power that is supplied (See Column 7 Line 29 to Column 8 Line 4).

Bedell et al. is silent on the use of a sensor mounted on the drive unit. Baston et al. teaches an apparatus for load limiting in an aircraft high-lift system (See Fig. 1) comprising an angle position transmitter (30, 31 and 32) on the drive unit (23+24+20) where the position sensor is used to monitor asymmetry (see abstract) and signals are sent to a control unit (27). At the time of invention, it would have been obvious to one of ordinary skill in the art to include a position sensor on the drive unit of Bedell et al. in view of the teaching of Baston et al. The motivation for doing so would have been to further monitor the system for drive failure.

5. Regarding **Claim 57**, Bedell et al. discloses a monitoring unit (50) capable of signal comparison between two respective subsystems (FSEU1 and FSEU2).

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6. Regarding **Claims 59 and 61**, Bedell et al. discloses using signals provided by the sensors (44) mounted on branching transmissions (43) of the drive trains to calculate a reference value ("expected slat states"; See Column 7 Lines 47-48).

7. Regarding **Claim 63**, Bedell et al. discloses that the drive unit can be controlled in a highly dynamic manner (via 50 and 52).

8. Regarding **Claim 64**, Bedell et al. discloses a drive unit and branching transmission as described above, but does not disclose a shaft section between the two that is highly flexible. Baston et al. discloses a shaft section of high flexibility (21). At the time of invention it would have been obvious to one of ordinary skill in the art to provide the shaft section of Baston et al. between the drive unit and branching transmission of Bedell et al. The motivation for doing so would have been to locate the drive unit in an easy to access area for maintenance reasons.

9. **Claims 54, 56, 58, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bedell et al. and Baston et al. as applied to claims 52, 55, and 59 above, and further in view of Lindstrom et al. (US Patent 6,299,108 B1).** Bedell et al. and Baston et al. disclose the apparatus for load limiting as described above. Bedell et al. also teaches the use of position transmitters (44) at the branching transmissions (43) of the drive trains, but does not teach the position transmitters being angle position transmitters. Lindstrom et al. teaches the use of angle position transmitters (30) on branching transmissions (12) for a drive limiting apparatus. At the time of invention, it would have been obvious to one of ordinary skill in the art to replace the position sensors (44) of Bedell et al. with the angle position transmitters (30) of

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Lindstrom et al. The motivation for doing so would have been to provide more accurate angle information, i.e. a higher position resolution.

Response to Arguments

10. Applicant's arguments with respect to claims 52 and 54-64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy D. Collins can be reached on (571)272-6886. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy D. Collins/
Supervisory Patent Examiner, Art
Unit 3644

/B. M. O./
Examiner, Art Unit 3644